Manual Test Plan for cs242-assignment1.2

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Environment setup

- Python 3.8.10
- Pymongo 3.12.0
- bs4 4.10.0
- requests 2.22.0
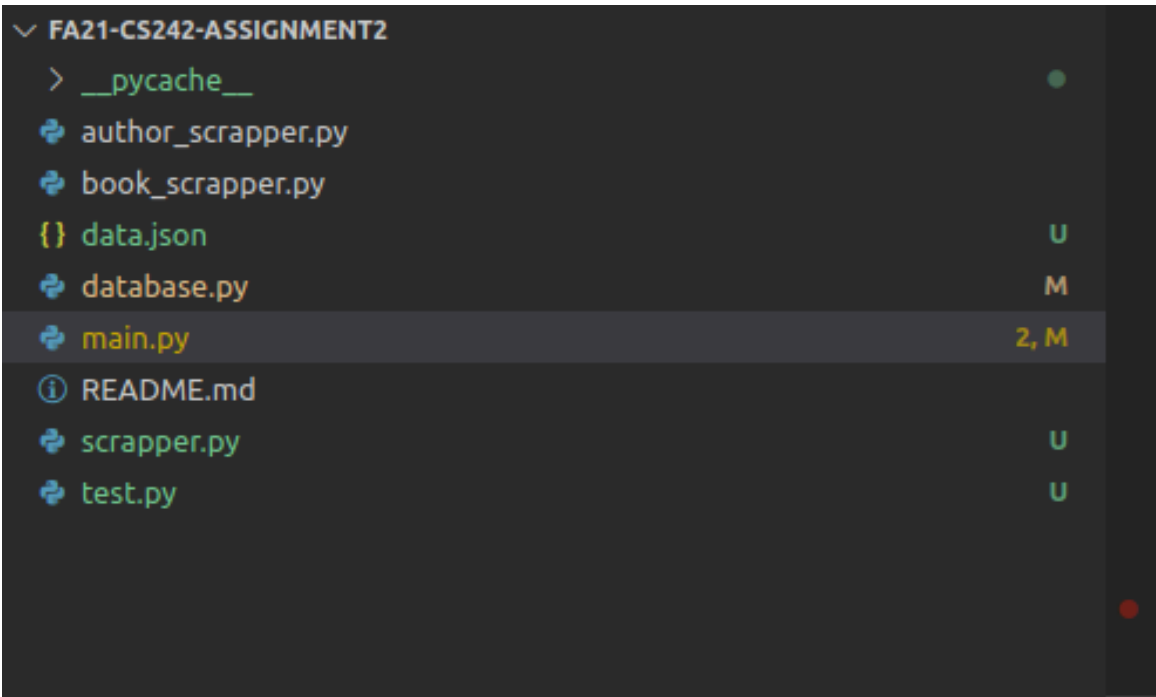
Test 1.1 - Commandline interface for output

- To export existing book/author to JSON file, the user needs to run *python3 main.py -output author* or *python3 main.py -output book*

- If the user enters an argument other than "*author*" or "*output*" , the program will not run and the user will receive a message about the invalid argument

```
output table author to data.json
lei@lei-ROG-Strix-G531GW-G531GW:~/cs242-assignment2/fa21-cs242-assignment2$ python3 main.py -output other
invalid argument
lei@lei-ROG-Strix-G531GW-G531GW:~/cs242-assignment2/fa21-cs242-assignment2$
```

- If the user runs *python3 main.py -output author* and the existing author was output successfully as a JSON file, a message will appear

```
lei@lei-ROG-Strix-G531GW-G531GW:~/cs242-assignment2/fa21-cs242-assignment2$ python3 main.py -output author
output table author to data.json
lei@lei-ROG-Strix-G531GW-G531GW:~/cs242-assignment2/fa21-cs242-assignment2$
```

- A JSON file named "data.json" should appear

```
∨ FA21-CS242-ASSIGNMENT2
  > __pycache__                          ●
  🐍 author_scrapper.py
  🐍 book_scrapper.py
  {} data.json                           U
  🐍 database.py                         M
  🐍 main.py                             2, M
  ⓘ README.md
  🐍 scrapper.py                         U
  🐍 test.py                             U
```

- The user should be able to see author information in data.json
  (screenshot of example output is on next page)

```json
[
  {
    "_id": "1825",
    "author_url": "https://www.goodreads.com/author/show/1825.Harper_Lee",
    "name": "Harper Lee",
    "review_count": "130007",
    "image_url": "https://images.gr-assets.com/authors/1593873322p5/1825.jpg",
    "rating": "4.23",
    "rating_count": "5239515",
    "author_books": [
      "https://goodreads.com/book/show/2657.To_Kill_a_Mockingbird",
      "https://goodreads.com/book/show/24817626-go-set-a-watchman",
      "https://goodreads.com/book/show/87783.Harper_Lee_s_To_Kill_a_Mockingbird",
      "https://goodreads.com/book/show/24374.Harper_Lee_s_To_Kill_a_Mockingbird",
      "https://goodreads.com/book/show/38359009-to-kill-a-mockingbird",
      "https://goodreads.com/book/show/25402234-the-harper-lee-collection",
      "https://goodreads.com/book/show/54032225-the-literature-book",
      "https://goodreads.com/book/show/25711896-countdown-to-go-set-a-watchman",
      "https://goodreads.com/book/show/12072136-to-kill-a-mockingbird-the-agony-and-the-ecstasy-the-winter-of-our-di",
      "https://goodreads.com/book/show/34017081-mockingbird-songs",
      "https://goodreads.com/book/show/9328447-best-sellers-from-reader-s-digest-condensed-books",
      "https://goodreads.com/book/show/229750.Ledigs_legend_res_Lesevergn_gen",
      "https://goodreads.com/book/show/8361478",
      "https://goodreads.com/book/show/28688194-to-kill-a-mockingbird-chapter-compilation",
      "https://goodreads.com/book/show/169172.To_Kill_a_Mockingbird_The_Screenplay_",
      "https://goodreads.com/book/show/26597057-to-kill-a-mockingbird-harperperennial-modern-classics",
      "https://goodreads.com/book/show/87780.Harper_Lee_s_To_kill_a_mockingbird",
      "https://goodreads.com/book/show/27257710-to-kill-a-mockingbird",
      "https://goodreads.com/book/show/16468433-cliffsnotes-on-lee-s-to-kill-a-mockingbird",
      "https://goodreads.com/book/show/52373496-harper-lee-collection-2-books-set",
      "https://goodreads.com/book/show/55141169-to-kill-a-mockingbird-k-nigs-erl-uterungen",
      "https://goodreads.com/book/show/57131637-s-ucizi-o-pas-re-c-nt-toare",
      "https://goodreads.com/book/show/58693080-matar-a-un-ruise-or",
      "https://goodreads.com/book/show/57992724-to-kill-a-mockingbird-cd-plus-caedmon-cd-sampler-8c-fd",
      "https://goodreads.com/book/show/53434714-best-sellers-from-readers-digest-condensed-books-1961-deluxe-edition",
      "https://goodreads.com/book/show/57992892-go-set-a-watchman-cd-costco-assortment",
      "https://goodreads.com/book/show/57606046-magnificent-animals-a-coloring-book",
      "https://goodreads.com/book/show/58917080-b-lb-l-ld-rmek",
      "https://goodreads.com/book/show/58665769-matar-a-un-ruise-or",
      "https://goodreads.com/book/show/58868801-sa-ucizi-o-pasare-cintatoare",
      "https://goodreads.com/book/show/3698379-harper-lee-s-to-kill-a-mockingbird",
      "https://goodreads.com/book/show/26720326-to-kill-a-mockingbird",
      "https://goodreads.com/book/show/6982317-to-kill-a-mockingbird",
      "https://goodreads.com/book/show/25817883-to-kill-a-mockingbird",
      "https://goodreads.com/book/show/7876249-to-kill-a-mockingbird-a4-gcse",
      "https://goodreads.com/book/show/28444664-to-kill-a-mockingbird",
      "https://goodreads.com/book/show/43435118-to-kill-a-mockingbird",
      "https://goodreads.com/book/show/27189707-to-kill-a-mockingbird",
      "https://goodreads.com/book/show/29073534-summary---to-kill-a-mockingbird",
      "https://goodreads.com/book/show/15732548-reader-s-digest-condensed-books-1962",
      "https://goodreads.com/book/show/169174.Understanding_to_Kill_a_Mockingbird",
      "https://goodreads.com/book/show/13600721-to-kill-a-mockingbird-cgp---the-text-guide",
      "https://goodreads.com/book/show/29232001-harper-lee",
      "https://goodreads.com/book/show/391060.To_Kill_a_Mockingbird_Vokabularien_",
      "https://goodreads.com/book/show/87786.Harper_Lee_To_Kill_A_Mockingbird",
      "https://goodreads.com/book/show/27795776-to-kill-a-mockingbird-harperperennial-modern-classics",
      "https://goodreads.com/book/show/26068831-to-kill-a-mockingbird",
      "https://goodreads.com/book/show/26159712-to-kill-a-mockingbird-by-harper-lee",
      "https://goodreads.com/book/show/3698376-teaching-harper-lee-s-to-kill-a-mockingbird-from-multiple-critical-persp",
      "https://goodreads.com/book/show/2264106.Coles_Notes_To_Kill_a_Mockingbird",
      "https://goodreads.com/book/show/39071411-to-kill-a-mockingbird-k-nigs-erl-uterungen",
      "https://goodreads.com/book/show/22714698-reader-s-digest-condensed-books-summer-1960-volume-42",
      "https://goodreads.com/book/show/53698286-to-kill-a-mockingbird"
    ],
    "related_authors": [
      "https://www.goodreads.com/author/list/18.Gary_Paulsen",
      "https://www.goodreads.com/author/list/1838.Geoffrey_Chaucer",
      "https://www.goodreads.com/author/list/2384.Janet_Evanovich",
      "https://www.goodreads.com/author/list/2751.Bret_Easton_Ellis",
      "https://www.goodreads.com/author/list/5350.L_M_Montgomery",
      "https://www.goodreads.com/author/list/9355.Dean_Koontz",
      "https://www.goodreads.com/author/list/21618.Raina_Telgemeier",
      "https://www.goodreads.com/author/list/32878.Michel_Houellebecq",
      "https://www.goodreads.com/author/list/173617.Susan_May",
      "https://www.goodreads.com/author/list/706255.Stieg_Larsson",
      "https://www.goodreads.com/author/list/5747496.Dina_Rae",
      "https://www.goodreads.com/author/list/6464090.Martha_Reynolds",
      "https://www.goodreads.com/author/list/15502566.Fred_Fordham",
      "https://www.goodreads.com/author/list/18157251.Hilarie_Burton_Morgan",
      "https://www.goodreads.com/author/list/18302001.Elizabeth_Wetmore"
    ]
  },
]
```

Sep 27 23:28 ●

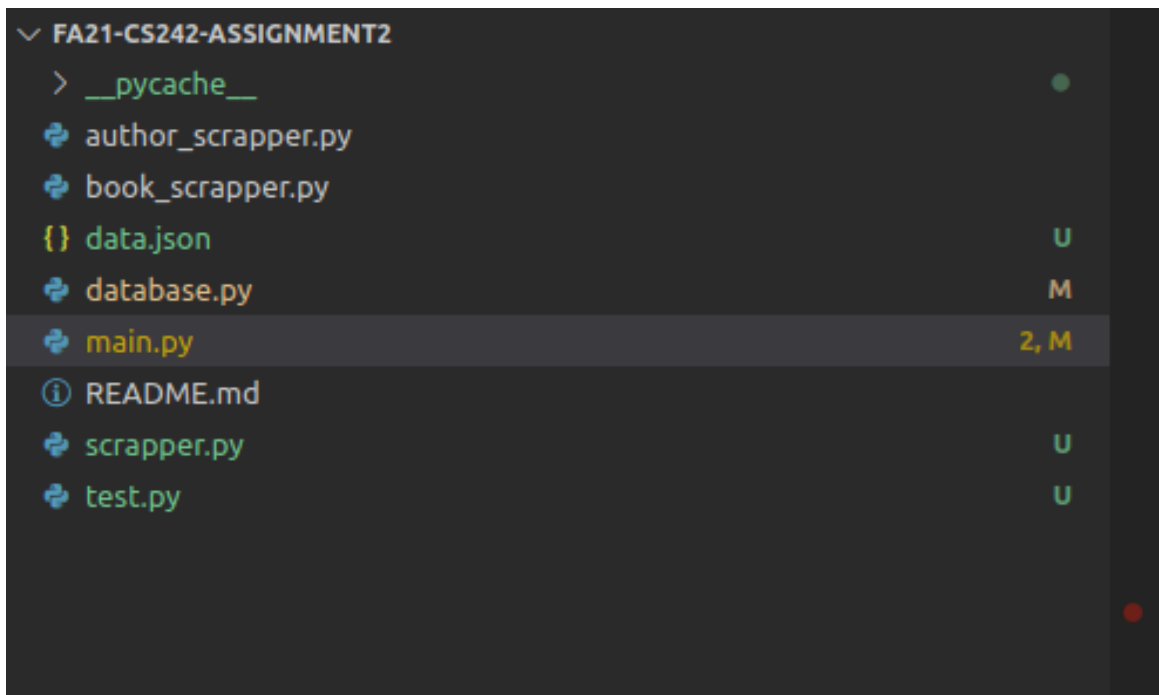data.json – fa21-cs242-assignment2 – Visual Studio Code

]
,

"_id": "18",
"author_url": "https://www.goodreads.com/author/show/18.Gary_Paulsen",
"name": "Gary Paulsen",
"review_count": "35827",
"image_url": "https://images.gr-assets.com/authors/1595914847p5/18.jpg",
"rating": "3.8",
"rating_count": "526893",
"author_books": [
  "https://goodreads.com/book/show/50.Hatchet",
  "https://goodreads.com/book/show/141372.Brian_s_Winter",
  "https://goodreads.com/book/show/2915.The_River",
  "https://goodreads.com/book/show/141371.Brian_s_Return",
  "https://goodreads.com/book/show/2913.Brian_s_Hunt",
  "https://goodreads.com/book/show/6795756-woods-runner",
  "https://goodreads.com/book/show/669427.Lawn_Boy",
  "https://goodreads.com/book/show/2923.Winterdance",
  "https://goodreads.com/book/show/570633.Harris_and_Me",
  "https://goodreads.com/book/show/760848.Dogsong",
  "https://goodreads.com/book/show/121807.The_Transall_Saga",
  "https://goodreads.com/book/show/960495.Nightjohn",
  "https://goodreads.com/book/show/52560.Soldier_s_Heart",
  "https://goodreads.com/book/show/2930.My_Life_in_Dog_Years",
  "https://goodreads.com/book/show/329014.Woodsong",
  "https://goodreads.com/book/show/52516022-gone-to-the-woods",
  "https://goodreads.com/book/show/53.Guts",
  "https://goodreads.com/book/show/207589.The_Winter_Room",
  "https://goodreads.com/book/show/420786.Mr_Tucket",
  "https://goodreads.com/book/show/6485194-notes-from-the-dog",
  "https://goodreads.com/book/show/669428.Tracker",
  "https://goodreads.com/book/show/52559.The_Rifle",
  "https://goodreads.com/book/show/9371073-liar-liar",
  "https://goodreads.com/book/show/99730.The_Island",
  "https://goodreads.com/book/show/13642646-road-trip",
  "https://goodreads.com/book/show/52549.Canyons",
  "https://goodreads.com/book/show/329002.The_Voyage_of_the_Frog",
  "https://goodreads.com/book/show/2917.How_Angel_Peterson_Got_His_Name",
  "https://goodreads.com/book/show/52541.The_Car",
  "https://goodreads.com/book/show/3566566-hatchet-and-the-return",
  "https://goodreads.com/book/show/7556643-lawn-boy-returns",
  "https://goodreads.com/book/show/6072302-mudshark",
  "https://goodreads.com/book/show/52551.The_Haymeadow",
  "https://goodreads.com/book/show/669453.Call_Me_Francis_Tucket",
  "https://goodreads.com/book/show/2931.The_Crossing",
  "https://goodreads.com/book/show/52556.Sarny",
  "https://goodreads.com/book/show/141396.Tucket_s_Ride",

- If the user runs *python3 main.py -output book* and the existing books was output successfully as a JSON file, a message will appear

```
output table author to data.json
lei@lei-ROG-Strix-G531GW-G531GW:~/cs242-assignment2/fa21-cs242-assignment2$ python3 main.py -output book
output table book to data.json
lei@lei-ROG-Strix-G531GW-G531GW:~/cs242-assignment2/fa21-cs242-assignment2$
```

- A JSON file named "data.json" should appear

```
∨ FA21-CS242-ASSIGNMENT2
  > __pycache__                            ●
  🐍 author_scrapper.py
  🐍 book_scrapper.py
  {} data.json                            U
  🐍 database.py                           M
  🐍 main.py                            2, M
  ⓘ README.md
  🐍 scrapper.py                           U
  🐍 test.py                               U
```

- The user should be able to see book information in data.json
  (screenshot of example output is on next page)

```json
[
  {
    "_id": "52373496",
    "book_url": "https://www.goodreads.com/book/show/52373496-harper-lee-collection-2-books-set",
    "rating": "3.84",
    "rating_count": "70",
    "author": "Harper Lee",
    "author_url": "https://www.goodreads.com/author/show/1825.Harper_Lee",
    "title": "Harper Lee Collection 2 Books Set (To Kill A Mockingbird, Go Set a Watchman)",
    "ISBN": "9123956623(ISBN13:9789123956623)",
    "review_count": "1",
    "image_url": "https://i.gr-assets.com/images/S/compressed.photo.goodreads.com/books/1584194036l/52373496._SX318_.jpg",
    "similar_books": [
      "https://goodreads.com/book/show/38359009-to-kill-a-mockingbird",
      "https://goodreads.com/book/show/9912.The_Rules_of_Attraction",
      "https://goodreads.com/book/show/8525402-gulliver-s-travels",
      "https://goodreads.com/book/show/47281.Number_the_Stars",
      "https://goodreads.com/book/show/39999.The_Boy_in_the_Striped_Pajamas",
      "https://goodreads.com/book/show/11387515-wonder",
      "https://goodreads.com/book/show/332613.One_Flew_Over_the_Cuckoo_s_Nest",
      "https://goodreads.com/book/show/5113949-the-returning",
      "https://goodreads.com/book/show/51322821-leon-juliette",
      "https://goodreads.com/book/show/231804.The_Outsiders",
      "https://goodreads.com/book/show/357664.Because_of_Winn_Dixie",
      "https://goodreads.com/book/show/40591267-girl-stop-apologizing",
      "https://goodreads.com/book/show/14935.Sense_and_Sensibility",
      "https://goodreads.com/book/show/30753738-the-choice",
      "https://goodreads.com/book/show/18114322-the-grapes-of-wrath",
      "https://goodreads.com/book/show/1519311.More_Than_a_Slave",
      "https://goodreads.com/book/show/52600886-boku-no-hero-academia-dj---ore-ga-sensei-to-xxx-suru-10-no-houhou-10-st",
      "https://goodreads.com/book/show/30474.The_Communist_Manifesto",
      "https://goodreads.com/book/show/58372.Whatever",
      "https://goodreads.com/book/show/58860552-eternal-euphoria",
      "https://goodreads.com/book/show/12232938-the-lovely-bones",
      "https://goodreads.com/book/show/6101138-wolf-hall",
      "https://goodreads.com/book/show/40138364-talking-with-female-serial-killers",
      "https://goodreads.com/book/show/50132543-talking-with-psychopaths-and-savages",
      "https://goodreads.com/book/show/1924932.Shared_Madness",
      "https://goodreads.com/book/show/24447201-love-of-blood",
      "https://goodreads.com/book/show/488495.Inside_the_Mind_of_BTK",
      "https://goodreads.com/book/show/4706601-serial-killers",
      "https://goodreads.com/book/show/589848.Talking_with_Serial_Killers_2",
      "https://goodreads.com/book/show/832471.Face_to_Face_with_Serial_Killers"
    ]
  },
  {
    "_id": "2657",
    "book_url": "https://goodreads.com/book/show/2657.To_Kill_a_Mockingbird",
```

```json
242        ]
243      },
244      {
245        "_id": "23466036",
246        "book_url": "https://www.goodreads.com/book/show/23466036-all-the-stars-in-the-sky",
247        "rating": "4.58",
248        "rating_count": "3268",
249        "author": "Sarah Lyons Fleming",
250        "author_url": "https://www.goodreads.com/author/show/7171979.Sarah_Lyons_Fleming",
251        "title": "All the Stars in the Sky",
252        "review_count": "286",
253        "image_url": "https://i.gr-assets.com/images/S/compressed.photo.goodreads.com/books/1414521468l/23466036.jpg",
254        "similar_books": [
255          "https://goodreads.com/book/show/38771137-survive",
256          "https://goodreads.com/book/show/48654761-torment",
257          "https://goodreads.com/book/show/57006919-vengeance",
258          "https://goodreads.com/book/show/42502068-alive",
259          "https://goodreads.com/book/show/41737948-prepared",
260          "https://goodreads.com/book/show/20428667-until-the-end",
261          "https://goodreads.com/book/show/51285942-bloody-sunset",
262          "https://goodreads.com/book/show/36534219-alone",
263          "https://goodreads.com/book/show/26176950-incubation",
264          "https://goodreads.com/book/show/50311352-blood-moon",
265          "https://goodreads.com/book/show/49628888-the-first-30-days",
266          "https://goodreads.com/book/show/54340167-pandemonium",
267          "https://goodreads.com/book/show/48761017-far-from-home",
268          "https://goodreads.com/book/show/17406353-100-days-in-deadland",
269          "https://goodreads.com/book/show/41033347-bloody-sunrise",
270          "https://goodreads.com/book/show/18857162-deadland-rising",
271          "https://goodreads.com/book/show/39652603-odium",
272          "https://goodreads.com/book/show/44652451-the-end-of-everything",
273          "https://goodreads.com/book/show/18489271-deadland-s-harvest",
274          "https://goodreads.com/book/show/58244694-mad-world",
275          "https://goodreads.com/book/show/58244546-shattered-world",
276          "https://goodreads.com/book/show/44601726-the-darkest-winter",
277          "https://goodreads.com/book/show/20440598-in-the-end",
278          "https://goodreads.com/book/show/54741210-maelstrom",
279          "https://goodreads.com/book/show/27389747-outbreak",
280          "https://goodreads.com/book/show/44653091-the-end-of-everything",
281          "https://goodreads.com/book/show/58244779-new-world",
282          "https://goodreads.com/book/show/54644030-the-good-the-bad-and-the-undead",
283          "https://goodreads.com/book/show/9648068-the-first-days",
284          "https://goodreads.com/book/show/58244783-forgotten-world"
285        ]
286      },
287      {
288        "_id": "22080473",
289        "book_url": "https://goodreads.com/book/show/22080473-and-after",
```

Test 1.2 - Commandline interface for output

- To use the scrapper, the user needs to run *python3 main.py -scrap starting_url num_books_to_scrap num_ authors_to_scrap*
- The starting url must be a valid url that is a book page in goodreads
- If the user inputs an invalid url, the scrapper will not run and error will be printed to the terminal

```
main.py: command not found
lei@lei-ROG-Strix-G531GW-G531GW:~/cs242-assignment2/fa21-cs242-assignment2$ python3 main.py -scrap google.com 1 1
invalid url
lei@lei-ROG-Strix-G531GW-G531GW:~/cs242-assignment2/fa21-cs242-assignment2$
```
Ln 78, Col

- If the user inputs a valid url that is not a book page in goodreads, the scrapper will not run and error will be printed to the terminal

```
3712.Carrie_Ryan 1 1
invalid url
lei@lei-ROG-Strix-G531GW-G531GW:~/cs242-assignment2/fa21-cs242-assignment2$
```
Ln 78, Col 39   Spaces: 4   UTF-8

- For a large number of books or authors to scrap (specifically number of books to scrap > 200 and number of authors to scrap > 50), the program will print out a warning before running

```
invalid url
lei@lei-ROG-Strix-G531GW-G531GW:~/cs242-assignment2/fa21-cs242-assignment2$ python3 main.py -scrap https://www.goodreads.com/author/show/144
3712.Carrie_Ryan 300 200
invalid url
warning: this is a really large number to scarp
lei@lei-ROG-Strix-G531GW-G531GW:~/cs242-assignment2/fa21-cs242-assignment2$
```
Ln 78, Col 39   Spaces: 4   UTF-8

- If the scrapper run successfully, the user should be able to see the progress

```
    56d4a0a..8c4be55  assignment-2.0 -> assignment-2.0
lei@lei-ROG-Strix-G531GW-G531GW:~/cs242-assignment2/fa21-cs242-assignment2$ python3 main.py -scrap https://www.goodreads.com/book/show/23466
036-all-the-stars-in-the-sky 2 1
valid
finish scrapping book with id 23466036
finish scrapping author with id 7171979
https://goodreads.com/book/show/18586621-until-the-end-of-the-world
18586621
https://goodreads.com/book/show/22080473-and-after
22080473
finish scrapping book with id 22080473
https://goodreads.com/book/show/23466036-all-the-stars-in-the-sky
finish scrapping author with id 7172819
lei@lei-ROG-Strix-G531GW-G531GW:~/cs242-assignment2/fa21-cs242-assignment2$
                                                                    Ln 1, Col 1   Spaces: 2   UT
```